

ABSTRACT

A mounting interface for a spindle motor allows the optimization of the spindle dynamics. The mounting interface provides a steadfast relationship between a motor and a baseplate, wherein the mounting interface includes at least three surface points forming a single plane acting as a common boundary between the motor and the baseplate. The three surface points may be pads, and the pads may be coupled to the baseplate or to the mount flange. The three surface points provide reduced contact area between the mount flange and the baseplate, and the reduced contact area lowers the rigidity of the mount flange and the resonant frequencies. The surface area of the pads and the material of the pads is chosen to reduce acoustical noise. In addition, a damping ring may be provided for dissipating distortion energy between the motor, baseplate and/or mount flange.